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Article

Behaviour Change in the UK Climate Debate: An Assessment of Responsibility, Agency and Political Dimensions

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Abstract: This paper explores the politics around the role of agency in the UK climate change debate. Government interventions on the demand side of consumption have increasingly involved attempts to obtain greater traction with the values, attitudes and beliefs of citizens in relation to climate change and also in terms of influencing consumer behaviour at an individual level. With figures showing that approximately 40% of the UK's carbon emissions are attributable to household and transport behaviour, policy initiatives have progressively focused on the facilitation of "sustainable behaviours". Evidence suggests however, that mobilisation of pro-environmental attitudes in addressing the perceived "value-action gap" has so far had limited success. Research in this field suggests that there is a more significant and nuanced "gap" between context and behaviour; a relationship that perhaps provides a more adroit reflection of reasons why people do not necessarily react in the way that policy-makers anticipate. Tracing the development of the UK Government's behaviour change agenda over the last decade, we posit that a core reason for the limitations of this programme relates to an excessively narrow focus on the individual. This has served to obscure some of the wider political and economic aspects of the debate in favour of a more simplified discussion. The second part of the paper reports findings from a series of focus groups exploring some of the wider political views that people hold around household energy habits, purchase and use of domestic appliances, and transport behaviour-and discusses these insights in relation to the literature on the agenda's apparent limitations. The paper concludes by considering whether the aims of the *Big Society* approach (recently established by the UK's Coalition Government) hold the

potential to engage more directly with some of these issues or whether they merely constitute a "repackaging" of the individualism agenda.

Keywords: environmental policy; climate change; agency; behaviour; lifestyles

1. Introduction

Environmental issues have become more central to government decision-making in the UK in recent years, gaining a noticeably higher profile in relation to the traditional hierarchy of policy. The effects of industrial oil spills, ozone depletion, atmospheric pollution, and more recently the risks posed by global climate change, have all served to inform the political agenda in increasingly visible ways. A series of energy white papers during the last decade have been among the higher profile policy statements reflecting the UK Government's intention to address the urgency of climate change through mainstream policy. This intent was confirmed in 2006 by the appearance of the government financed *Stern Review* which provided a comprehensive economic, social and environmental hypothesis of future scenarios should the UK fail to address the causes of climate change. Even more significantly, the 2008 Climate Change Bill—incorporating the UK government's pledge to oversee the transition to a society which is based on an 80 per cent reduction in greenhouse gas (GHG) emissions by 2050—clearly indicates a more central role for environmental issues in consideration of the UK's present and future policy agenda.

The practical difficulties of reaching increasingly stringent UK targets for CO_2 emission reductions have encouraged policy-makers to embrace and promote "bottom-up" solutions in order to address, for example, patterns of consumption and lifestyles such as those associated with travel, eating habits, leisure practices and patterns of living. As a 2004 Department for Environment, Food and Rural Affairs (Defra) document points out:

The environmental agenda has traditionally been focused on regulating point sources of pollution, for example from industrial plant. The future environmental agenda is about dealing with the myriad ways in which we put strains on the environment by how we produce, what we produce and the ways in which we consume. Our overarching goal is to be able to continue to pursue economic growth with all the benefits it brings without damaging the environment at home or oversees [1] (p. 23).

Lorenzoni *et al.* [2] show that the last decade in particular has been characterized by the search for a more radical shift in policy through which to address these developments—largely resulting from political acknowledgement of the growing complexities of how to integrate effective sustainability measures in policy.

Building the Big Society [3] is the most recent political statement on how the UK Government intends to address these issues through a new localism agenda in which citizens, communities and local government are given "…the power and information they need to come together, solve the problems they face and build the Britain they want" [3]. (1) According to Scott [4] the *Big Society* approach is an attempt to embed climate change (and the challenge of addressing it) across civil society, integrating energy as a core *political* concern, and engaging people into the design and implementation of policy, as integrated facets of the coalition Government's vision for sustainability.

The crux of this paper lies in the suggestion that limitations in many of the policies developed in the UK around energy and climate to date, relate to an underlying emphasis on individuals—rather than on the Government, government agencies or companies. This policy emphasis suggests that it is individuals, as agents of change, who are going to have to be the driving force behind reductions in greenhouse gas emissions [5]. This paper considers some of the reasons why attempts to forge this synthesis have been instrumental in driving environmental policy in the UK in recent years, grounding politics in serving the needs, preferences and agency of individuals as an integral element of "third way citizenship". In the discussion section we assess the complexities of delivering this renewed focus on local level responsibility and action in the light of recently conducted empirical work with members of the general public, and provide fresh insights into the comparative influence of structural, political, financial, psychological, social/cultural and knowledge factors on the adoption of pro-environmental energy behaviour at an individual level.

2. Governance, the Individual, and the "Risk Society"

Theorists of contemporary social and political change, including Putnam and Giddens [6,7] have made the point that the role and concept of western citizenship has undergone significant change in recent times. Giddens in particular has argued that policy initiatives must now develop concurrently with what has become a more atomized, and indeed "individualized" society. By this, he argues that people have become much more reflexive in terms of the choices and decisions that they make. Giddens' work had had a particular influence on UK policy since 1997 [8], informing what Callinicos [9] has described as "…a dialectical transcendence of past political polarities and the integration of a new form of market economics and progressive social policies".

For similar reasons, Beck [10] has suggested that it is apparent that the role of agency has come to assume a much greater role in contemporary policy-making as well as within the broader political spectrum. Finlayson [11] suggests that this position reflects broader current trends in both academia and politics regarding the ideological status of "agency" in relation to "structure". Giddens makes the particular point that the influence of modernist institutions such as the welfare state, educational establishments, and the role of governance itself, must now be much more receptive to the risk-or *reflexive* stage of modernity-where the possibilities for new choices or life chances must be engaged by policy makers. He suggests, for example, that areas such as healthcare and social exclusion have witnessed a greater focus on the prescription of individual agency away from state-led responsibility. Williams [12] explains these changes with reference to the changing relationship between the individual and welfare state provision:

Central to a new paradigm of welfare is an emphasis on the capacity of people to be creative, reflexive human beings; that is to be active agents in shaping their lives, experiencing, acting upon and reconstituting the outcomes of welfare policies in various ways [12].

Developing this argument, Giddens states that: "the classical welfare state developed in a society where scarcity was the main social problem, especially in the context of the immediate post-war period. But in many circumstances in post-industrial societies we are dealing, not with scarcity of resources, but with issues of lifestyle" [7] (p. 135). He suggests that a growing concern with environmental degradation can be traced to the significance of living in a "post-scarcity society".

Most ecological issues, including global climate change, are not to do with scarcity of resources, but with the profligate use of them. Traffic congestion and pollution are good examples. Los Angeles once upon a time looked like the city of the future, maximizing the effective use of space in relation to individual mobility. But with the multiplication of car ownership it has become a social and ecological dead end. The main freeways are choked with cars for much of the day, and are often almost at a standstill. In spite of the rigorous control measures, levels of air pollution are high. European cities, which were not designed for car travel, are in many cases just as clogged up with traffic and polluted [7] (p. 135).

Giddens reasons therefore that invariably solutions to environmental problems depend upon lifestyle change on the part of individuals, and that this could not be imposed from the "top" without substantial difficulties. He argues that the role of governments and other concerned agencies is to develop a combination of incentives and sanctions that will have a tangible influence on behaviour. The political drive towards encouraging a more sustainable society has observably tried to tap into this ethos.

3. What is "Behaviour Change"?

Growing urgency in policy circles on the need for more effective strategies to reduce carbon emissions in both production and consumption cycles has seen the development of a stronger focus on agency through the development of "behaviour change" initiatives. This has become a central aspect of climate change mitigation in the UK, particularly over the last 5–10 years.

Stating that "there is increasing international acceptance that climate change is a serious threat to human well-being and environmental integrity" Whitmarsh [13] argues:

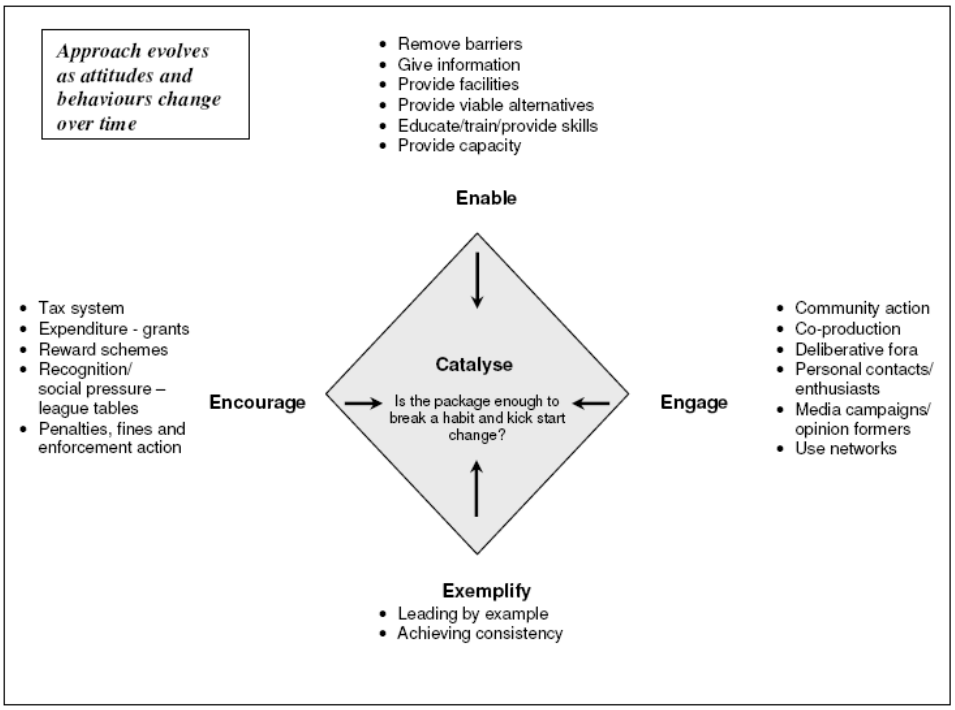
In the UK, the Labour Government has identified climate change as a priority issue, and positioned itself as a global leader in addressing it. Public education to enlist societal support for and involvement in mitigation efforts is a key element of the UK Government's climate change strategy. Since the early 1990s, there has been several government information campaigns intended to educate the UK public about climate change and to encourage personal energy conservation [13] (p. 1).

In the UK situation climate change was not originally a priority for the Labour Government when it came to office in 1997 [14]. There was an assumption that the structural changes associated with the "dash for gas"—which had seen a significant reduction in the UK's greenhouse gas emissions—meant that the issues could be "managed" through a continuation of the *Market for Energy* strategy that had been bequeathed by the previous Conservative administration. This encouraged the new government confidently to sign up to the Kyoto Protocol in 1997, and also to commit to a new national target of a 20% reduction in GHG emissions by 2010. As King [15] reasons, it was largely this situation that encouraged the Labour Government to position itself as a global leader in addressing the challenge of climate change. However, this strategy encountered substantial obstacles almost immediately, as the UK's carbon emissions began to increase again during the mid-1990s. Policy-makers were forced to acknowledge that structural shifts informed by energy privatization were now being eroded, necessitating the need for a shift in emphasis towards a consumption based policy strategy which, it was thought, might have the capacity to deal more effectively deal with growth in road transport use and air travel [16] and also increasing energy demand in housing [17].

The parameters by which the UK Government hoped to align "behaviour change" in individuals with the complexities of climate change in policy was first articulated, and synthesized diagrammatically, in the 2005 Sustainable Development strategy [18]. Chapter 3 of the strategy, in particular, reflected a substantially different view of what it meant to change behaviours than had ever been in mainstream policy before. The "diamond model" (or "4 Es" model—see Figure 1) intended to provide "…a framework for thinking about the different approaches policy-makers can take to influence a behaviour, and how to balance these to produce an effective package of interventions which 'catalyse' change. The model suggests using a mix of interventions to Enable, Engage, Exemplify and Encourage" [19] (p. 13). In essence, the model was intended as an accessible summary of the multiplicity of intervention possibilities, and so explicitly aimed to broaden policy horizons in this area.

The UK Government's *Community Action* 2020—*Together We Can* (included in the 2005 Sustainable Development Strategy) encapsulated the increased focus on behaviour change, setting out the terrain in which policy makers believed this could be made to come about. While the term "behaviour change" suggests an individualized approach to policy making, the "framework for behaviour change" attempted to clarify different influences on behaviour and, more importantly, where the leverage for change might occur. The diamond model itself was therefore located within what might be described as a "Russian doll" model of policy making, pointing the way towards coordination between regional, community and individual levels of policy making, as opposed to traditional top-down approaches. Reducing the acknowledged problem of energy demand and carbon emissions emanating from UK households for instance, would now be couched within the requirements of what was outlined in the previous section of this paper, and Giddens' ideas around a "third way citizenship", where there are rights as well as responsibilities in modern democratic societies.

Figure 1. The UK Government's "Framework for Behaviour Change" [18] (p. 26).



Concurring with this argument, Miliband (UK Secretary of State for Environment, Food and Rural Affairs, May 2006–June 2007) [20] (p. 347) set out an argument for engaging citizens and mobilizing communities as an essential aspect of targeting energy demand, where "44% of all emissions are by individual households, most of which comes from four transactions: electricity and gas in our homes, and car and air travel". The UK Government acknowledged that reliance on "technological fixes" alone would only go so far in relation to revised environmental aims and that effective policies needed to embrace the complex interaction between the scientific, economic and social aspects of energy use. With an overall rationale running through this programme of encouraging "the appropriate behavioural responses amongst the UK public via communication strategies and economic measures" [13] (p. 13), the four dimensions of the diamond model were viewed as inter-connected elements of an overall strategy. They are explained below:

- *Enable.* As Figure 1 illustrates, one of the most important ways through which the UK Government hoped to drive change at a behavioural level was to be as an *information provider* in order to encourage the individual consumer to make more informed choices in their purchasing habits. Thus for instance, the development of energy labeling on products, government led media campaigns such as *Act on* CO_2, local government led environmental awareness raising programmes and various other internet sites where individuals can calculate their carbon footprints are all examples of providing information to both individuals and groups to encourage more informed choices on the consequences of their personal energy use. One of the principal rationales behind this point of the diamond model drew upon the economic argument that a market for household energy efficiency investments such as loft insulation, cavity wall insulation and double glazing can develop more effectively once the appropriate price signals are identified and addressed by policy makers.
- *Engage.* Enabling consumers to make more informed choices in their personal energy use was seen by the UK Government as being closely linked to the need to engage their attention in the first place. For example, it was proposed that awareness raising campaigns which are embedded at a local level are far more likely to resonate with individuals if led by local authorities [21]. To this end it was hoped that that information on climate change for instance, would be more effective through dissemination by local authorities than a centrally delivered message; integrating it within existing links between local political jurisdiction and service provision. It has been argued that much of the progress in the level of kerb-side recycling that now takes place in the UK, can be attributed to the establishment of mandatory recycling targets concomitant with increased waste funding for local government [22]. This has enabled local authorities to implement improved infrastructures and collection facilities with the result of enhancing (and easing) household participation.
- *Encourage.* As outlined above, the UK Government felt that providing appropriate regulation could enable the market to be harnessed in pursuit of behaviour change objectives. Thus for instance, changes to vehicle excise duty had been put in place in the UK in order to encourage the purchase of smaller, less polluting cars. Various congestion charge schemes had also been developed in order to encourage less "unnecessary" journeys by private car. The *London Congestion Charge*, for example, has been the largest of its kind ever undertaken by a capital city and a part of the rationale behind it had been to act as a disincentive to private car use in inner London and to encourage more widespread use of private transport and cycling, thereby reducing

congestion and contributing to environmental goals. Surplus profit from the charge has also been invested in improvements to London's public transport infrastructure.

- *Exemplify*. The diamond model's final dimension effectively framed the first three aims (enable, engage, encourage) by proposing that the UK Government must "lead the way" in encouraging a more sustainable society; in other words, leading by example. The 2008 *Climate Change Bill* has been perhaps the clearest illustration of these aims where the UK Government set a longer-term target of an 80 per cent reduction in emissions by 2050; punctuated by a series of interim targets by which political leaders will be accountable themselves. The practice of government (nationally and locally) was here considered also to be part of the aim to "exemplify" sustainability aims in relation to more strategic design and management of its own buildings and operations.

By enacting the strategy embodied in the diamond model, a core aim was to "capture" some of the fundamental behavioral norms which were felt to motivate individuals in modern society, in order to catalyze change at the level of consumption habits and practices. Policy makers were hopeful that an emphasis on consumer demand would ultimately be effective in encouraging systemic change—the theory being that markets often respond and adapt to changes in patterns and trends in UK consumption practices. It was intended that this approach would also complement more direct macro policy initiatives, such as carbon trading.

In order to gain further insights into lifestyle diversity among the population and to extend the foundations of the diamond model, Defra went on to formulate the "Framework for Pro-environmental Behaviours" [23]. This considered the response (in terms of willingness and capability to act) of population clusters to 12 headline environmental goals, encouraging behavioural changes and subsequent impact reduction at an individual level. As Scott [4] points out:

> …clusters of the population referred to as "positive greens" are generally willing and capable, in contrast to those that lack awareness of environmental issues and are part of the poorer population. Tailored approaches are required to target the different segments. Segments with high ability and willingness to act will need a different approach to segments unwilling to act. An insight like this will allow policy makers to maximize the effectiveness of their policies.

4. A Dilemma between Citizenship and Behaviour Change?

Whitmarsh [13] argues that there is so far little evidence to suggest that behaviour change as a political strategy has been particularly successful in steering consumption trends and associated carbon emissions in the UK towards more sustainable outcomes. She states that recognition of this was partly responsible for the UK Government's revision of domestic targets on carbon emissions. The principal indicator of progress in the behaviour change strategy, according to Whitmarsh, has been through political monitoring and auditing of carbon dioxide emissions in different domains of consumption. These consumption domains have, in turn, been extrapolated from measures of energy consumption within each sector:

> …energy consumption in the UK has continued to rise in recent years. Energy use in transport is increasing the most rapidly; domestic energy consumption has risen slightly; and industrial energy demand is declining. Social surveys also show a rise in car use and an increase in the proportion of two-car households [13] (p. 13).

There have been numerous reasons offered as to the relative failure so far of policies which have been aimed at changing consumer behaviour in the UK. For example, O'Neill and Hulme [22] (p. 402) suggest that "climate change is an issue that is difficult to connect with in a tangible way at individual level", while Lorenzi and Pidgeon [24] assert that the issue itself is "remote both in space and time and it is perceived as affecting other communities and future generations". Whitmarsh [11] (p. 14) suggests that "government exhortations to reduce energy consumption will continue to go unheeded if they are incongruous with the social and physical context of everyday life".

Shove [25] also argues that the UK Government emphasis on behaviour change in policy has, ultimately, been limited-particularly in its objective of directing the "captured" complexity of human behaviour to increasingly ambitious environmental targets. Significantly, she suggests that the influence on human behaviour through the structural role of institutions, practices and cultural norms is often underplayed in favour of an overemphasis on the individuals' willingness to "make the right choices". Importantly, Shove points out: "it is clear that lifestyles, especially in the west, will have to change if there is to be any chance of averting the long-term consequences of resource depletion, global warming, the loss of biodiversity, the production of waste or the pollution and destruction of 'natural' environments" [25] (p. 1) However, she postulates that policies designed to promote sustainable consumption have in general remained focused upon "an extraordinarily narrow understanding of human behaviour". Despite political rhetoric to the contrary, she suggests that policy initiatives have all too often subsumed the complex, social and cultural dimensions of agency in favour of a model of human behaviour underpinned by the "rational individual"; an approach which is ultimately insufficient because the issue of "lifestyles" is invariably approached as an individual phenomenon, devoid of the influence of social and cultural drivers:

> To put Brundtland's famous definition another way, future generations will encounter a much degraded world if present trends continue. Apparent agreement on this point disguises important theoretical divisions regarding the conceptualization of behaviour, lifestyles and consumption. Are "lifestyles" in some sense "chosen" or are they better seen as ways of life, that is as part of the social fabric… What is the relation between "behaviour"—what people do and what they think? Is consumption an expression of taste, or a moment in a complex system of social, cultural and material reproduction? [25] (p. 1).

Shove's work highlights one of the greatest difficulties for policy makers in terms of a direct focus on individual behaviour change as a way in which to encourage the shift to a low-carbon economy. That is, the definition of consumption—and what motivates people to consume in the ways that they do—itself lies at the heart of the problem. The work of Harvey [26] provides a useful guide on changes in UK political economy and how they have been able to influence social and cultural change. Harvey suggests that consumption practices in the UK from the post-war period can be traced to wider changes in political economy which have encouraged the influence of choices, tastes and preferences around a

particular "market-based" form of citizenship. Although these changes, in turn, have inevitably influenced the ways in which "collective" issues (such as environmental, social and political concerns) have come to be viewed and understood, there seemingly remains a general reluctance amongst much of the UK population to change behaviour. Why should this be so?

While O'Neill and Hulme [27] point out that there is widespread recognition of the urgency of climate change, with "99% of citizens in the UK recognizing the terms 'climate change', 'greenhouse effect' or 'global warming'", only a minority of citizens routinely undertake pro-environmental actions in their daily lives to enable substantial reductions in consumption and energy demand. The following section of the paper explores some of the issues which frame this debate through recent findings from 12 focus group discussions that formed part of three complementary research projects exploring viewpoints on people's everyday energy behaviour, attitudes towards the environment, sustainability issues and links among these topics.

5. Empirical Study

This section describes and analyses some key findings to emerge from a series of twelve focus groups comprising members of the general public; carried out between December 2008 and October 2010. The groups were convened as part of the empirical phase of three complementary research projects that operated within the "Energy and Carbon Governance" theme of the Research Group on Lifestyles, Values and Environment (RESOLVE) at the University of Surrey.

5.1. Objectives

The principal objective of the focus group research was to explore the ways in which people relate to their own "agency" with respect to: (1) Household energy use and purchasing patterns; (2) The use of domestic appliances; and (3) Transport habits. The purpose of pursuing these themes with the participants was to shed light on some of the issues which continue to face policy makers in their attempts to implement an effective "environmental contract" with UK citizens through behaviour change initiatives. In particular the discussions were guided to focus on:

- the degree of political intervention; the benefits and drawbacks associated with different levels;
- the role and responsibility of business and industry; and
- the extent to which structural shifts can be balanced with an increased emphasis on individual behaviour change.

5.2. Approach and Methods

In accord with the recommended sample size for focus group research [28], each group recruited 10–12 adult participants. The samples themselves were stratified in respect of two primary selected variables: "stable" and "transition" consumer groups, and then sub-stratified according to income (income was used for recruitment as a proxy for "social patterns and lifestyles"—key variables which were explored with the participants as part of the focus group discussion guide), age and gender. The detail of this sampling is summarized in Table 1.

For the purpose of recruitment we used the following definition specification:

"Stable" = Adults (including those in rented accommodation) who have:

[and/or]
- not moved home in the last 10 years;
- not made substantial alterations to their property (in terms of build/rebuild or repair) in the last 10 years.

"Transition" = Adults who have:

and/or
- moved home during the last 2 years;
- are planning to move during the coming 2 years;
- Have made substantial alterations to their property (in terms of build/rebuild or repair) in the last 10 years;
- Are currently making substantial alterations to their property or plan to make substantial alterations to their property during the coming 2 years.

Table 1. Focus group sampling details.

	Consumer type	Income	Gender	Age
Group 1	Stable (S)	Low-mid (L-M)	~5 men (M) 5 women (W)	Mixed range from 25–45
Group 2	Stable (S)	Mid-high (M-H)	~5 men (M) 5 women (W)	Mixed range from 46–75
Group 3	Transition (T)	Low-mid (L-M)	~5 men (M) 5 women (W)	Mixed range from 25–45
Group 4	Transition (T)	Mid-high	~5 men (M) 5 women (W)	Mixed range from 46–75
Group 5	Stable (S)	Low-mid (L-M)	~5 men (M) 5 women (W)	Mixed range from 46–75
Group 6	Transition (T)	Mid-high	~5 men (M) 5 women (W)	Mixed range from 46–75
Group 7	Stable (S)	Low-mid (L-M)	~ 5 men (M) 5 women (W)	Mixed range from 25–45
Group 8	Transition (T)	Low-mid (L-M)	~5 men (M) 5 women (W)	Mixed range from 46–75
Group 9	Stable (S)	Low-mid (L-M)	~5 men (M) 5 women (W)	Mixed range from 25–45
Group 10	Stable (S)	Mid-high (M-H)	~5 men (M) 5 women (W)	Mixed range from 46 – 75
Group 11	Transition (T)	Mid-high (M-H)	~5 men (M) 5 women (W)	Mixed range from 25–45
Group 12	Transition (T)	Mid-high (M-H)	~5 men (M) 5 women (W)	Mixed range from 25–45

While representativeness is not itself an essential aspect of focus group research, it was decided that the participant samples should be drawn from different local authority areas in order to offer a degree

of spatial differentiation. This included different types of location from predominantly "urban" to deeply "rural" settings, and also attempted to capture a range of cultural diversity:

- Groups 1, 5,7 and 8: Surrey, Guildford;
- Groups 2 and 6: West Midlands, Birmingham;
- Group 3: East Sussex, Brighton;
- Group 4: Berkshire, Slough;
- Group 9: Shropshire, Shrewsbury;
- Group 10: London, Richmond;
- Groups 11 and 12: London, Islington.

Four themes were chosen to structure the schedule of questions for each focus group. The first three themes focused on key domestic energy issues, *i.e.*, domestic energy use, household appliances, and travel by car. An additional category, designed to elaborate on "wider issues", was also included to address issues relating to "governance", "trust" and "responsibility". Each topic was subdivided into a set of eight or nine questions alongside a series of "prompts". The prompts were introduced in order to stimulate discussion where necessary; and to encourage participants to expand on the questions themselves-which may well be independent of their individual knowledge territory. It also served to encourage a degree of reiteration to the discussion guide, enabling questions to be explored in a number of different ways, thus maximizing participants' responses to the same themes.

5.3. Results

Key findings from the twelve focus groups are presented in the following subsections, grouped around the core themes of "convenience", "comfort", "knowledge/information", "responsibility" and "regulation". In accordance with anonymity guarantees given to the participants, direct quotations are ascribed categorically (consistent with Table 1), *i.e.*, "SM, L-M, 25–45, Guildford" refers to a male participant in one of the Guildford focus groups, between twenty-five and forty-five years of age, and representing the "stable" consumer type category of the sampling frame.

5.3.1. Convenience

The issue of convenience was considered to be an important factor in participants' decisions with regard to both domestic energy use and purchase of appliances—almost always overriding potential environmental consequences. In relation to this, there was a strong impression from the majority of participants that ownership of certain appliances and products was almost "non-negotiable" and that white goods such as washing machines, cookers and fridges were a "right" for individuals to possess:

> *There isn't a replacement for some things that are so very convenient. For example, a tumble dryer…there is not an alternative unless you stick them [clothes] on the radiator and by definition you're having radiators on all day to get them dry (SM, L-M, 25–45, Birmingham).*

Some participants argued that the proliferation of electrical goods that we have seen in the last few years should also be accepted as being essential to modern living. Interestingly, while some individuals

argued that they "did what they could" in relation to environmental messages from the UK Government (such as switching off appliances fully or purchasing energy saving appliances where possible) it was suggested that the quantity of these goods in the modern household often made this difficult in respect of changing behaviour:

> *Well, we never used to have them we when we were youngsters…sort of DVD players and stuff like that, they weren't around…you had a record player. It's still the same sort of thing but there's more on the market than there ever was (SM, M-H, 46–75, Slough).*

The continued popularity of the private car as an accepted "lifestyle convenience" was strongly articulated by participants in all of the focus groups during discussions on people's transport habits. There was a general perception across the groups that people are attached to private car use for a range of predominantly psychological reasons; not only in relation to convenience, but also in terms of individual feelings of freedom, and comfort:

> *I like the independence of a car (TF, L-M, 25–45 Birmingham).*
> *I love my car. I couldn't be without it (TF, L-M, 25–45 Guildford).*

It was generally considered by many of the focus group participants that barriers to more widespread use and acceptance of public transport could be linked to the idea of "self-sufficiency". Issues of long waiting times; a lack of privacy; perceived differences in cost; and a lack of comfort were viewed as significant issues in this regard. Most participants argued the case that car use appealed directly to the daily concerns and practicalities of peoples' everyday lives; making the focus one of "individuality" rather than say a "collective" concern for the environment or for energy conservation in general.

5.3.2. Comfort

Both comfort and convenience emerged as lifestyle priorities for participants in all of the focus groups when asked about home energy use practices. There was a clear suggestion that "cultural" ideas of comfort and warmth-articulated by almost emotive responses such as "the sensation of heat" and "needing to feel warm"—were argued by participants to be almost non-negotiable aspects of modern-day living. Several participants from across the groups pointed out that they were more likely to turn their home heating up rather than to put on extra clothing. Additionally, many stated that they were more likely to leave heating at constant levels than to adjust it to different times and conditions. Some participants made the point that they would be prepared to trade higher bills if their own ideas relating warmth were to come into tangency with costs. Interestingly, these viewpoints did not seem to be linked to the different income levels represented in each group—participants across all income levels argued that they would be prepared to pay higher costs on their heating bills if it meant that they were able to stay warm:

> *"I would say that comfort comes before bill (TM, M-H, 46–75, Guildford).*
> *I'd pay anything to be warm if I was cold. If it's in the winter and it's cold, it would be [heating temperature practice adopted] how warm it is (SF, M-H, 46–75 Birmingham)."*

It was noticeable that participants in all groups generally argued that both energy efficiency and environmental considerations are secondary considerations to being comfortable. Even participants who had undertaken renovation work such as wall and roof insulation; window replacement; installation of solar panels; and replacement of heating systems with more efficient designs, argued that comfort and cost savings related to better energy efficiency are a higher priority for them than environmental concerns.

Similarly, in terms of travel decisions, comfort emerged as a key issue across all of the focus groups. In addition to factors of convenience many felt that the private car offered the most comfortable way of travelling. There was a general perception that public transport services would need to be greatly improved (particularly in terms of comfort) in order to encourage greater use by the general public. Participants complained for instance, that during peak travel times on train journeys, they often had to stand up in overcrowded carriages, making for uncomfortable journeys.

5.3.3. Knowledge and Information

Corroborating the findings of O'Neill and Hulme [26], it was clear that all focus group participants had awareness——in principal—of the salience of energy and environmental issues in relation to adapting society to the constraints of the planet. When asked about initiatives established by the UK Government during the previous decade, all participants were familiar with the *London Congestion Charge*, the *Warm Front Grant* and the *Home Energy Conservation Act.* Many suggested that the public, generally, have a greater understanding of environmental issues today as a result of efficiency ratings on electrical appliances; educational programmes in schools; government information campaigns; and television and media messages. There was acknowledgement however, that this "knowledge" does not necessarily translate into action (admittedly even in the participants' own lives) together with a general perception that policies providing information alone are likely to be insufficient to modify everyday behaviour on a widespread scale.

Some participants expressed a lack of trust in the information underpinning many of the policies that have been developed to address environmental issues, and as a result considered themselves less willing to act upon it:

> *It's always struck me…these incentives, you know…you feel that they're doing it to try and stop people using cars and things but clearly, look at the congestion zone—it's just as chock-a-block now as it's always been. So people distrust government because they feel that every initiative they bring out is geared to make money (SM, L-M, 46–75, Brighton).*

Other participants were distrustful of the scientific evidence for the existence of climate change and environmental degradation:

> *I mean it's happening, absolutely, but I'm not convinced it's brought on solely by human activity. I'm sure we've had an influence on it but I think it was going to happen anyway just as it has done a million times before you know…Ice Age etc., etc., (TM, M-H, 46–75, Richmond).*

5.3.4. Who is responsible?

While there was some agreement among the focus group participants of a need for the UK to become more sustainable, it was noticeable that there was no real consensus on where responsibility for this progress should lie. Concurring with the policy drive to encourage greater individual responsibility, some participants (although a minority) reasoned that the barriers, and also the opportunities for real change, need to be encouraged at the level of individuals:

> *Well, ultimately it's all of us…ultimately it's the consumer (SM, L-M, 25–45, Brighton).*

> *I don't know. I suppose the argument is if less and less people buy these products the demand is going to be less and then the carbon footprint (SF, L-M, 25–25, Islington).*

While others pointed to the influence of businesses, and the role that they could—or should—play, there was a general consensus that the onus should be on the UK government to take the lead:

> *I don't think anybody else has got the authority but the government unless they set up a separate body to take control of sustainability (SM, L-M, 46–75, Shropshire).*

> *Government-they're elected to govern the country aren't they? Even if you are not happy with the government in there, the majority of people want the government to govern (SF, M-H, 46–75, Islington).*

Interestingly however, this viewpoint was tempered with a measure of distrust in politicians and contemporary governing mechanisms from several participants. Some felt that one of the main problems in putting over effective political messages on sustainability and environmental responsibility is that the messages are invariably inconsistent and often contradictory. These participants, for example, focused on the government's sanctioning of expansion to the UK transport infrastructure and airport runways while simultaneously promoting sustainability ideals. Some also argued that politicians themselves need to "put their own houses in order" before asking the rest of the nation to behave in more environmentally responsible ways. For example, it was felt that although that UK Government had a very influential role to play in encouraging a more sustainable society, the message was likely to be diluted due to a widespread distrust in the formal political agenda:

> *They all have to lead by example—but they don't all have to drive their massive big cars do they? (SF, M-H, 25–45, Slough).*

It was also felt that the UK government, on its own, does not carry the necessary level of political weight needed to bring about the changes desired. It was argued that the ways in which influence is dispersed amongst political institutions, business and consumer power need to work together much more closely (*i.e.*, in a "joined-up" approach) towards sustainability as a common goal than they do at present:

> *Over the years, the government has foisted all the responsibility onto private companies, whereas it's a government responsibility to get these things up and running (TM, L-M, 25–45, Guildford).*

> *They've privatized all the energy companies so the energy companies…their profits go to the shareholders, whereas if it's nationalized they'd invest (TF, M-H, 46–75, Richmond).*

5.3.5. Should there be More Regulation?

Despite reservations on political leadership in the UK, some of the focus group participants suggested that the complexity of factors influencing contemporary lifestyles necessitates a measure of political intervention to encourage the adoption of more sustainable choices in society. It was suggested that there have been previous examples of societal changes that have worked over the long-term as a direct result of political intervention:

> *Well, I think the government, or a body such as the government, has got to sort of make the changes happen in terms of saying "this is what you must do…there's no choice in it (TM, L-M, 25–45, Brighton).*

> *When they wanted everyone to change from leaded petrol to unleaded petrol it never happened until they made it cheaper. If you want people to change their habits you've got to put economics in there. If you want people to save power, put a tax on it... (SM, M-H, 25–45, Shropshire).*

The area of transport drew mixed responses from participants with regard to whether there should be more regulation. While there was a general awareness of the negative consequences of environmental damage caused by car use, there was reluctance for more punitive measures being introduced for car users. Many participants argued that there was a clear need for the government to address current negative connotations associated with use of public transport. While participants pointed out that public transport did not offer the same psychological attractions as the private car, it was argued that greater public investment might go some way towards increasing the attractiveness of these modes of transport.

While there was a general trend across the focus groups in favour of technological change as opposed to individual behaviour change, some participants suggested that a more sustainable future would only be enabled through a combination of behavioural change *and* technological innovation:

> *I think it'll be a mix…it'll be some technological answers that will offer perhaps replacement for sources that we've got at the moment but they might come at a price and therefore people will start to change their behaviour because it's becoming too expensive, something like that. It will be one or the other and you won't…it won't be people changing their behaviour just morally (TM, M-H, 46–75, Slough).*

Some participants made the point that more "user friendly technology" was also needed to increase the visibility of energy consumption and encourage individuals to understand the energy and environmental implications of their purchasing choices. It was suggested for example, that consumers are often reluctant to use electronic temperature controls and water pumps, owing to a perception that they are too complicated to operate easily.

6. Discussion and Concluding Remarks

The study of lifestyles as a subject of academic inquiry has intensified in recent times, owing in part to the growing debate around sustainable consumption and to the increased significance of behaviour change as a set of policy initiatives. The practical difficulties of reaching increasingly stringent targets on the UK's CO_2 emissions have seen policy-makers attempting to engage more directly with individual lifestyles and patterns of consumption, particularly those associated with travel, eating habits, and leisure practices.

This paper has argued that there are clear lines to be drawn between behaviour change as an agenda *per se* and the more general political shift that has taken place in recent years regarding the role of agency in policy making. In the UK the emphasis has shifted, particularly over the last decade, from "top down" governance towards encouraging citizens to adopt pro-environmental lifestyle choices. The "diamond model", for example, was developed by policy makers precisely in order to capture the essence of citizenship "rights and responsibilities" through a broad-based range of interventions. The primary intention for this model, from the UK Government's perspective, was to provide a sufficiently far-reaching framework through which to galvanise agency and to direct behaviour towards environmental policy aims and objectives.

However, the UK's behaviour change agenda has arguably proven largely ineffectual to date where, in particular, it has been difficult for policy-makers to reach beyond the relatively small section of society who are already routinely engaged in pro-environmental habits. The challenge of realizing a broader level of connection continues to be particularly problematic for policy makers at all levels. It has been suggested that a key reason for this obstacle to engagement relates to the ways in which agency is influenced by a complex interaction of factors. Individuals articulate their own choices; they have their own reasons for doing what they do. Their actions are often neither explainable nor justifiable in a "rational economic maximiser" sense, and can be unpredictable vis-à-vis feelings of moral responsibility and obligation.

Whilst the issues that emerged from the focus group data considered in this paper are not particularly new in themselves—and are perhaps too small scale to generalize more widely—they nevertheless provide interesting insights into why an emphasis on behaviour change in isolation from other influences will continue to deliver minimal results without a more radical political agenda shift. With current figures showing that approximately 40% of carbon emissions are attributable to household and transport practices in the UK, engaging citizens in more sustainable lifestyles is one of the biggest challenges to UK government initiatives on climate change. The focus group discussions raised a number of interesting questions around wider issues that may either encourage or discourage the kind of agency responses explored in the first half of the paper. It would be reasonable to suggest that policies so far have yet to tap into this sense of political agency—one which, as Dobson [29] has argued is able to resonate with people as citizens rather than as consumers.

The *Big Society* agenda [30] is the latest attempt to address some of the more intractable problems that have been encountered so far on finding a balance between government, business, communities and individuals that will "deliver the reform, fairness and change Britain needs". The policy agenda itself has been outlined as developing around the following five areas:

- *To give communities more powers (localism and devolution).*
  One of the principal objectives here is to encourage a more "organic" agency response by encouraging higher levels of social learning between individuals within their communities. Here there is recognition that rather than engaging with the "usual suspects", community developed strategies might be able to encourage a more collective response to energy and climate issues.

- *To encourage people to take an active role in their communities.*
  It is hoped that by engaging people more directly in the issues that affect them, they will become empowered through a greater sense of ownership. For instance, a key aim in this regard is to encourage more decentralized energy generation which could be owned and run by communities themselves.

- *To transfer power from central government to local government.*
  Part of the *Big Society's* overarching objective is to address issues of "trust" in relation to the role of government and business. Changes in the UK's planning laws, for instance, in part recognise that local authorities might be better placed to oversee sustainability initiatives at the infrastructural level. It is also hoped that a continued devolvement of responsibility down to the local level might encourage "grassroots" politics around energy and climate issues.

- *To support co-ops, mutuals, charities and social enterprises.*
  The Coalition Government has pledged to encourage the creation of co-operatives, "mutuals", charities and social enterprises, and is committed to support these groups in realizing greater involvement in the running of public services. Again, it is hoped that both individual and community entrepreneurship will encourage a more bottom-up approach to sustainability.
- *To publish government data (open, transparent government).*
  In relation to environment and sustainability targets in the UK, the new government hopes to engender a greater sense of trust in what the machinery and mechanisms of governance are able to deliver, for instance, on national carbon emission reduction targets.

Mulugetta *et al.* [31] (p. 7541) point out: "it is clear that no single intervention can deliver the level of systemic change required to address climate change and energy security". One of the main ways in which the UK Government has proposed addressing carbon reduction targets is through strong, co-coordinated efforts from a variety of different stakeholders, with increased emphasis on community-led governance and a greater role for locally driven energy initiatives. It is worth bearing in mind the relevance of the *Big Society's* localism agenda in relation to the introduction of Feed in Tariffs and the Renewable Heat Incentive—both of which are likely to usher in new actors, including households, cooperatives, housing associations and schools, into the energy generation market. In addition to the behavioural aspects of the debate, there would seem to be a greater recognition now that policies which encourage changes in individuals will take the low carbon transition only so far. As Mulugetta *et al.* [31] (p. 7541) reason: '…significant efforts are needed on many fronts, involving both

small and large scale, implementing various ownership and delivery models, and deploying a wide range of low carbon technologies at the demand *and* supply ends'.

Public opinion on some of these issues was revealed through the focus groups findings, particularly in relation to participant responses around questions on "where responsibility for the move to a more sustainable society should lie"; "the degree of political intervention that is deemed desirable"; "the role and responsibility of business and industry"; and "the extent to which structural change might be balanced with the increased emphasis on individual change". It was found that while individuals are generally more informed on the urgency of environmental issues and in many respects more "enabled" now than in recent history (in terms of infrastructural and support provision), many still remain reluctant to change their own behaviour, preferring the comfort and convenience that is often associated with less environmentally sustainable lifestyle choices. The group discussions did however emphasize the need for a more open debate, involving members of the public, around the scope and nature of citizen responsibilities in the transition to a sustainable society.

In relation to these responsibilities many of the focus group participants felt that the current lack of connection and engagement is closely aligned to uncertainty surrounding the role of the individual with regard to the function of UK Government and business interests. Others argued that they were already "doing their bit" and that there was a responsibility on other agencies to play their part. There was general consensus around the notion that a lack of widespread engagement at an individual level could also be attributed to a lack of trust in many of the environmental messages emanating from the UK Government and from scientific experts. It is argued that many of the observations made during those discussions provide an illustration of the multifaceted relationship between structural, political, financial, psychological, social/cultural and knowledge issues—influencing consumption habits and energy-related choices in ways that have so far eluded the grasp of policy makers. We suggest that an over-emphasis on the "rational agency" of individuals in the development of these policies draws attention to some of the limitations of behaviour change in isolation from the wider, structural influences on individual decision-making.

The UK's Climate Change Act puts a legal imperative on the government to cut greenhouse gas emissions by 80% of their 1990 levels by 2050, with a mid-term target of 34% reduction by 2020. Reaching these targets will require strong, coordinated efforts from a dynamic combination of government bodies, institutions, public and private actors, community groups and individuals. Some observers suggest that the recently established *Big Society* agenda is an attempt to locate (individually and collectively) the political citizen at the local level—one who is more engaged with the issues outlined above through an increased emphasis on community level policy making. Further research will be needed to examine this shift of emphasis and its effectiveness (potential and actual) in enabling broader societal-political engagement in sustainable consumption and behaviour change at local and national levels.

References

1. HM Government. Delivering the Essentials of Life: Defra's Five Year Strategy, 2004. Available online: http://www.defra.gov.uk/corporate/about/what/5year-strategy/documents/5year-strategy.pdf (accessed on 21 May 2011).
2. Lorenzoni, I.; Pidgeon, N. Public views on climate change: European and USA perspectives. *Clim. Change* **2006**, *77*, 73-75.
3. The Cabinet Office. *Building the Big Society*; The Cabinet Office: London, UK, 18 May 2010. Available online: http://www.cabinetoffice.gov.uk/news/building-big-society (accessed on 21 May 2011).
4. Scott, F. Big society: What does it mean for environmental action? *Inside Track* **2010**, *26*, 1-18. Available online: http://www.respublica.org.uk/sites/default/files/InsideTrack_26.pdf (accessed on 18 February 2011).
5. Goodall, C. *How to Live a Low-Carbon Life*; Earthscan: London, UK, 2007.
6. Putnam R. *Bowling Alone*; Simon and Schuster: New York, NY, USA, 2000.
7. Giddens A. *The Third Way: The Renewal of Social Democracy*; Polity Press: Cambridge, UK, 1998.
8. Fudge, S.; Williams, S. Beyond left and right: Can the third way deliver a reinvigorated social democracy? *Crit. Sociol.* **2006**, *32*, 53-76.
9. Callinicos, A. *Against the Third Way: An Anti-Capitalist Critique*; Polity: Cambridge, UK, 2001.
10. Beck, U. *World Risk Society*; Polity Press: Cambridge, UK, 1999.
11. Finlayson, A. *Making Sense of New Labour*; Lawrence and Wishart: London, UK, 2003.
12. Williams, F. Agency and structure revisited. In *Social Exclusion and Social Work*; Barry, M., Hallett, C., Eds.; Russell House Publishing: Lyme Regis, UK, 1999.
13. Whitmarsh, L. Behavioural responses to climate change: Asymmetry of intentions and impacts. *J. Environ. Psychol.* **2008**, *29*, 13-23.
14. Helm, D. *Energy, the State, and the Market*; Oxford University Press: Oxford, UK, 2004.
15. King, D. Climate change science: Adapt, mitigate or ignore? *Scienc*e **2004**, *303*, 176-177.
16. Royal Commission. Report on Environmental Pollution, 2000. Available online: http://www.rcep.org.uk (accessed on 9 February 2011).
17. Jones, E.; Leach, M.; Wade, J. Local policies for DSM: The UK's home energy conservation act. *Energy Policy* **2000**, *28*, 201-211.
18. HM Government. *Securing the Future: The UK Government Sustainable Development Strategy*; HMSO: Norwich, UK, 2005. Available online: http://www.sustainabledevelopment.gov.uk/publications/pdf/strategy/SecFutcomplete.pdf (accessed on 26 January 2011).
19. Department for Energy, Food, and Rural Affairs. *Behaviour Change: A Series of Practical Guides for Policy-Makers and Practitioners, Number 1. Sustainable Resource Use in the Home Summer 2006*; Department for Energy, Food, and Rural Affairs, Centre for Sustainable Development, University of Westminster: London, UK, 2006. Available online: http://randd.defra.gov.uk/Document.aspx?Document=SD14002_3798_INF.pdf (accessed on 14 February 2011).
20. Miliband, D. A greener shade of red. In *Politics for a New Generation*; Pearce, N., Margo, J., Eds.; Palgrave: London, UK, 2007; pp. 337-350.

21. DECC. *The UK Low Carbon Transition Plan: National Strategy for Climate and Energy, ISBN 9780108508394*; Department of Energy and Climate Change: London, UK and The Stationary Office: Norwich, UK, July 2009. Available online: http://www.decc.gov.uk/en/content/cms/publications/lc_trans_plan/lc_trans_plan.aspx (accessed on 29 January 2011).
22. Perrin, D.; Barton, J. Issues associated with transforming household attitudes and opinions into materials recycling: A review of two recycling schemes. *Resour. Conserv. Recycl.* **2001**, *33*, 61-74.
23. Department for Energy, Food, and Rural Affairs. *A Framework for Pro-Environmental Behaviours Report*; The Stationary Office: London, UK, 2007. Available online: http://www.defra.gov.uk/evidence/social/behaviour/documents/behaviours-jan08-report.pdf (accessed on 2 February 2011).
24. Lorenzi, I.; Nicholson-Cole, S.; Whitmarsh, L. Barriers perceived to engaging with climate change among the UK public and their policy implications. *Global Environ. Change* **2007**, *17*, 445-459.
25. Shove, E. Changing Human Behaviour and Lifestyle: A Challenge for Sustainable Consumption? Department of Sociology, University of Lancaster: Lancaster, UK, 2003. Available online: http://www.psi.org.uk/.../shovechanginghumanbehaviourandlifestyle-200308.pdf (accessed on 21 January 2011).
26. Harvey, D. *The Condition of Postmodernity*; Blackwell: Oxford, UK, 1997.
27. O'Neill, J.; Hulme, M. An iconic approach for representing climate change. *Global Environ. Change* **2009**, *19*, 402-410.
28. Kreuger R.A. *Focus Groups: A Practical Guide for Applied Research*; Sage: London, UK, 1988.
29. Dobson A. Environmental citizenship and pro-environmental behaviour. *Rapid Research and Evidence Review*; The Sustainable Development Research Network, Policy Studies Institute: UK, 2010. Available online: http://www.sd-research.org.uk (accessed on 7 February 2011).
30. Cabinet Office, *Building the Big Society,* Cabinet Office, London, UK, 2010. Available online: http://www.cabinetoffice.gov.uk/news/building-big-society (accessed on 4 February 2011).
31. Mulugetta, Y.; Jackson, T.; van der Horst, D. Carbon reduction at community scale. *Energy Policy* **2010**, *38*, 7541-7545.